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M 34M
Cap. 2

MONTANA WEATHER AND CROP SUMMARY
(6-Months-April through September 1962)

October 26, 1962

U. S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service

U. S. DEPARTMENT OF COMMERCE
Weather Bureau

TEMPERATURE April was unusually warm with temperatures averaging above normal in all sections. Extremes ranged from 70 degrees the 24th at a number of stations to 1 degree at Lakeview the 1st. This was the first time since 1952 that a 90-degree maximum had been recorded in April, and it was also the first time since 1949 that the minimum temperature did not fall below zero degree. May was cool. Freezing or colder minimums were observed at nearly all stations one or more days the first week. June temperatures averaged a little warmer than seasonal in all divisions except the western and south-central. Freezing temperatures occurred at a large number of stations in the west portion during the first week. July was unseasonably cold. Frost damaged tender vegetation the first week in several areas west of the Continental Divide. Cool temperatures continued throughout August, and freezing occurred the first several days of September and again on the 8th and 9th. The latter half of September was quite warm. The summer maximum of 104 degrees (at the Miles City downtown station June 26 and Brandenburg August 4) was the lowest since 1944 when 103 degrees was the high reading for the summer. There were no prolonged periods with maximums 90 degrees or warmer.

PRECIPITATION The period of dry weather which had prevailed over much of the northeast quarter of Montana for several years with a brief interruption by good rains in September 1961 continued through April 1962. This intensified already critical droughty conditions in north-central and northeastern Montana. Statewide, this was the driest April since 1952. One of the wettest Mays in Montana's history terminated the drought. Precipitation totals were in excess of 5 inches at several stations in the central and southeastern divisions, but a small area in Liberty and adjacent counties measured less than two inches of rain. June rainfall was deficient in all areas except the northeastern division. Above normal precipitation was the rule in July and August. The exceptions were west of the Divide, and parts of the central division which had sub-normal moisture in July; and the southeastern area, much of the north-central division, and central and southern areas west of the Divide which were below normal in August. September moisture was generally deficient except in the east portion and local areas of the western third. For the 6-month period, precipitation was above normal over most of the State, but near to short of normal west of the Divide, in the west portion of the north-central division, and in a few small areas elsewhere.

SEVERE STORMS Unfortunately, some of the thundershowers that bring summer moisture also bring hail, and the spring and summer of 1962 was no exception. Estimated crop losses from hail exceeded \$6,000,000 and property damage approximated \$1,000,000. A hailstorm caused about a million dollars of property damage at Billings on May 20. This storm also damaged some crops in outlying areas, but the beneficial moisture more than compensated for this damage. Other hailstorms caused property and crop damage estimated at \$500,000 each in the north-central portion July 1; in southeastern Montana July 2; eastern Montana July 6; northern Blaine County July 16 and 17; and northern Phillips and Valley counties August 4. An unusual number of tornadoes was reported. Damage of more than one-fourth million dollars was caused by a tornado and accompanying high winds in the Baylor-Opheim communities (Valley County) August 4. Other damaging tornadoes were reported near Dillon May 17, near Fairview June 22, Havre July 1 and Dovetail August 7. Smaller tornadoes that did no damage were observed near Deer Lodge May 17 and Jackson June 14. A number of funnel clouds were sighted in the Billings and Belgrade-Bozeman areas, but reports indicate they did not touch the ground.

CROP PROGRESS - 1962 SEASON
April through September

Topsoil moisture supplies were barely adequate during April for survival of winter wheat in most areas and shortages existed in some central and north-central counties. Subsoil reserves were generally inadequate in most of the dryland farming areas east of the Divide. Moderate to severe winterkill of winter wheat occurred in northern and north-central areas. Because of droughty conditions and poor crops last year, supplies of hay and roughage were short by April 1962 in many counties east of the Divide. Growth of grass was slow and much supplemental feeding of livestock was necessary through the second week of May.

Spring tillage and seedbed preparations were retarded in early April by wet topsoil conditions. Field work was well underway in the Billings-Columbus area by April 10, but just starting in many other parts of the State. After the middle of the month, weather became favorable and planting of small grain and sugar beets progressed rapidly.

Winter wheat made slow growth up through the second week of May as a result of the limited moisture. High winds caused further deterioration, and many fields were reseeded to spring wheat or other crops. Rains beginning about May 11 brought needed moisture to most areas and greatly improved the prospects, especially for spring seeded crops. However, by that date much of the winter wheat acreage had already been plowed up. Planting of spring wheat was virtually complete by the end of the third week of May and most other small grains were seeded by the end of the month.

At the beginning of June, crop prospects were favorable. Cutting of alfalfa hay started during the second week. Yields were below earlier expectations because of winterkill, and slow growth due to cool weather. Seeding of flax was completed by the middle of June. Winter wheat was nearly all headed by July and by the end of the month, combining had started in a few fields. Harvest became general the first week of August, nearly two weeks later than last year when drought forced maturity. Rust, rarely a serious threat to Montana wheat production, reduced yields and test weights in some fields in the eastern third of the State. Harvesting of winter wheat was virtually complete by September 8. Barley harvest was also nearly complete. Combining of spring wheat continued into the second week and oats into the third week of the month.

Killing frosts occurred in early September in nearly all areas of the State. Late maturing grain crops, corn, beans, seeds and hay crops were injured in varying degrees. Potato vines were killed in many areas and digging became general during the second week of September. Sugar beet harvest was just getting started by September 29.

Fall seeding of winter wheat started in late August and became statewide during the second week of September. Operations were about 90 percent completed by the end of the month. Germination was generally fair to excellent. Topsoil moisture shortages developed in some areas, but subsoil moisture was generally adequate. Range feed continued adequate through September and by the end of the month one-half of the range cattle and 55 percent of the sheep had been moved to their fall and winter ranges.

The 1962 crop season was a good one for most Montana farmers. Record barley and hay crops are in prospect. Production of all wheat is expected to nearly equal the 10-year average despite a sharp reduction in acreage harvested. Ranges and pastures have furnished unusually good forage this year and weights of cattle and lambs are generally heavier than usual. Only a few counties in the north-central part of the State failed to receive adequate moisture to produce normal crops. In that area much of the acreage was abandoned and not harvested.

6-Month Total Precipitation, April 1962 - September 1962 (Incl.)

Station	Precipitation	6-Month Normal	Station	Precipitation	6-Month Normal
<u>WESTERN DIVISION</u>					
Alberton	8.34		Missoula 2 WNW	6.87	7.49
Big Fork 12S	9.12		Missoula WBAS	5.98	7.34
Creston	6.11		Ovando 1 SW	9.52	7.80
Darby	6.54	7.45	Ovando 7 WNW	9.90	
Deer Lodge 3W	6.57		Philipsburg RS	9.73	9.74
Drummond FAA AP	5.95	7.62*	Fleasant Valley	6.06	7.99
East Anaconda	8.68	8.43	Polebridge	7.56	
Elliston	11.11		Polson Airport	6.92	8.53
Essex	13.77		Polson Kerr Dam	6.41	
Eureka RS	3.69		Saint Ignatius	7.65	9.31
Fortine 1 NNE	6.35	9.19	Saint Regis	8.44	
Hamilton	7.41	6.67	Seeley Lake RS	10.38	
Haugan	9.02	9.05	Stevensville	6.13	6.57
Heron 2 NW	10.53	10.24	Sula	10.14	
Hungry Horse Dam	11.88		Summit	15.31	
Kalispell WBAS	5.44	8.09	Superior	7.18	7.57
Kalispell	5.56		Thompson Falls PH	8.84	8.18
Libby RS 1 NE	6.07	6.70	Trout Creek	8.80	
Libby 32 SSE	8.72		Troy RS	9.04	
Lindbergh Lake	13.92		Troy 18 N	13.82	
Lolo Hot Springs	9.58		West Glacier	9.88	11.74
Lonepine 1 WNW	3.88	5.57			
<u>SOUTHWESTERN DIVISION</u>					
Alder 17 S	8.17		Jackson	8.22	
Belgrade FAA AP	9.58	9.23*	Lakeview	11.79	
Boulder	7.32		Lima	8.55	7.78
Bozeman Ag. Col.	12.39	10.90	Norris 3 ENE	10.84	
Bozeman 12 NE	19.46		Norris Madison PH	15.23	11.87
Butte FAA AP	8.21	8.33	Pony	12.19	
Dillon FAA AP	8.27	6.95*	Trident	9.46	
Dillon WNCB	9.54	8.12	Twin Bridges	8.03	
Divide 2 NW	9.04		Virginia City	13.70	9.53
Ennis	9.93	8.29	West Yellowstone	11.87	9.63
Gallatin Gateway 26 S	8.95		Whitehall	7.58	7.52*
Glen 4 N	7.15		Wisdom	6.70	
Hebgen Dam	12.63	11.31			

* Estimated normal.

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Station	Precipitation	6-Month Normal	Station	Precipitation	6-Month Normal
<u>NORTH-CENTRAL DIVISION</u>					
Babb 6 NE	10.99	13.53	Harlem	11.07	8.95
Big Sandy	8.92	9.24	Havre	9.41	8.61
Blackleaf	8.39		Hays	14.90	
Brady Azone	5.23		Loma	10.13	
Browning	8.24	10.17	Loring	14.89	
Chester	5.51		Joplin 1 N.	9.90	
Chinook	8.51	9.25	Malta	18.35	8.84
Choteau	8.03	9.34	Malta 35 S	15.14	
Conrad	4.22	9.49	Phillips 1 S	14.22	
Cut Bank FAA	8.22	9.12	Saco (Nelson Res.)	15.77	
Del Bonita	7.60		Shelby	5.56	
Dunkirk	7.57	8.88	Shonkin 7 S	23.72	
Fairfield	8.74	9.32	Simpson 4 NNW	8.25	8.16
Forks 5 NE	16.08		Sweetgrass	7.23	
Fort Assinniboine	8.76	8.56	Telegraph Creek	15.13	8.51
Fort Benton	10.83	10.01*	Tiber Dam	6.44	
Gildford	9.55		Turner	13.24	
Goldbutte 7 N	6.61		Valier	6.80	10.26

CENTRAL DIVISION

Augusta	9.34	10.07	Lenep	11.69	
Augusta 11 WNW	15.93		Lewistown FAA AP.	20.03	12.02
Austin 1 W	12.91		Lincoln RS	10.55	
Barber	8.76		Melstone	12.87	8.60
Canyon Ferry PH	10.12		Moccasin Exp. Sta.	15.82	10.64
Cascade 5 S	12.53	10.45	Raynesford	14.32	
Cascade 20 SSE	12.46		Roundup	10.60	8.22
Denton	14.28		Roy 8 NE	19.03	
Flatwillow ENE	16.30	9.53	Stanford 2 NE	14.44	11.19
Gibson Dam	17.27	12.01	Sun River 5 SW	9.00	
Grass Range	18.63		Toston	9.93	
Grass Range 15 NNE	15.85		Townsend	8.34	
Great Falls WBAS	10.94	9.72	Utica 11 WSW	13.64	
Harlowton	17.30		White Sulphur Spgs.	11.37	11.19
Helena WBAS	10.55	7.49	Winifred	14.80	9.15
Holter Dam	8.51	9.07			

* Estimated normal.

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Station	Precipitation	6-Month Normal	Station	Precipitation	6-Month Normal
<u>SOUTH-CENTRAL DIVISION</u>					
Ballantine	10.18	7.99	Joliet	13.71	
Big Timber	12.79	10.06	Kirby 1 S	12.48	
Billings Water Plant	9.60	9.43	Livingston FAA AP	11.57	10.23*
Billings WBAS	8.53	8.73	Melville R W	13.40	
Bridger	8.57		Mystic Lake	17.80	15.25
Broadview	12.05		Nye	15.18	
Busby	12.52	8.81	Rapelje 4 S	13.41	9.25
Columbus	10.43	9.51	Red Lodge	12.52	13.39
Crow Agency	8.39	9.32	Wilsall	9.67	
Gardiner	6.96		Wilsall 8 NE	12.97	
Hardin	10.34		Wyola	9.68	9.04*
Huntley Exp. Sta.	10.50	7.96	Yellowstone Park		
Hysham	12.52		NE Entrance	15.15	
Hysham 19 SSE	10.22				
<u>NORTHEASTERN DIVISION</u>					
Bloomfield	11.18		Nohly 3 WNW	12.02	
Bredette	10.01		Opheim 10 N	11.33	
Brockway	15.69		Opheim 12 SSE	12.03	
Circle	14.77	9.28	Poplar	13.72	10.21
Culbertson	13.09	10.26	Raymond Brd. Sta.	11.97	
Fort Peck	11.43		Redstone	14.15	
Frazer	12.49	9.74	Richey	17.06	
Glasgow WBAS	14.66	9.26	Savage	13.71	10.82
Glendive	14.29	9.91	Scobey	13.69	
Hinsdale	14.74		Sidney	14.70	10.72*
Jordan	12.31	7.81	Vida	15.80	10.81
Lambert	15.08		Westby	11.28	
Lustre 4 NNW	10.43	9.45	Wolf Point 4 ESE	14.82	
Medicine Lake 3 SE	14.53	10.35			
Mosby 2 ENE	13.48				
Mosby 18 N	14.82				
<u>SOUTHEASTERN DIVISION</u>					
Birney	9.13		Mildred	12.01	9.56
Boyes	12.02		Miles City	14.02	
Brandenberg	9.29		Miles City FAA AP	16.09	9.04
Broadus	12.12	10.10*	Mizpah 4 NNW	15.63	
Colstrip	11.91	10.48	Moorhead 5 NE	11.09	
Ekalaka	16.27	10.32	Otter 9 SSW	13.75	
Forsyth 2 E	11.62		Plevna	12.62	9.70
Ingomar 11 NE	10.04		Ridgway	13.84	
Lame Deer	10.65		Rock Springs	9.19	
			Terry	12.72	
			Wibaux 2 E	13.49	

*Estimated normal.

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